In the Specification:

Page 9, paragraph of lines 4-15, amend to read as follows:

The embodiment of Figure 2 comprises a collection and re-direction optic assembly CRD, a pair of diffraction gratings G1 and G2, and a retroreflector assembly RR (which can veritically displace and retro-reflect n-1 beams). The CRD functions to collect and re-direct the n-1 beams from the RR back through the gratings G1 and G2. As shown in Figure 2, inputs 1, 2, and 3 are incident onto gratings G1 and G2 producing outputs 1′, 2′, and 3′, shown by arrow 13 as combined outputs, and complimentary outputs 1* and 2*, as indicated by the arrows. Outputs 1* and 2* are reflected by the RR back through gratings G1 and G2 to the CRD, as shown by the double arrows, and are redirected by the CRD, as indicated at 11 and 12 onto gratings G1 and G2. The CRD is placed such that the optical beams are properly routed back through the gratings G1 and G2 onto the outputs 1′ and 2′ to complete the routing of all output channels.

Page 9, line 19, paragraph bridging page 9 to line 2 of page 10, amend to read as follows:

The embodiment of Figure 3 comprises an input optic 16, identical diffraction gratings G1 and G2, collection optic assembly 17, and two wavelength-selective add/drop (3-port) filter modules M1 and M2, with the filters of each module being different. Inputs 1, 2, and 3 are directed as indicated by arrow 18 through optic 16 onto grating G1 and to grating G2 with outputs from grating G2 indicated at 1′, 2′, 3′, 1*, and 2* and which are directed through collecting optic assembly 17 whereafter outputs 1″ and 1* are directed into M2 having an output 19, outputs 2″ and 2* are directed into M1 having an output 20, and output 3″ becomes output 21 as indicated by arrow 22. For N channels, N-1 different filters are required for NxN fully non-blocking interconnection.

Page 10, line 14, paragraph bridging page 10 to line 24 of page 11, amend to read as follows:

Figure 4 schematically illustrates the coarse WDM grating router experimental setup. Initial experimental results using 3 inputs and 3 outputs are hereinafter described. In Figure 4, the inputs A, B, and C are mapped to outputs 1, 2, 3, 1*, and 2*, which are subsequently combined with add/drop filters F1 and F2 to produce the final 3 outputs X, Y, and Z. Wavelength routing was demonstrated using 3 wavelength channels: 827, 864, and 99 nm. Graded index (GRIN) 62.5/125 μm MMF inputs and outputs were terminated in an MT ferrule to provide a fiber to fiber pitch of 250 μm. Three fibers were illuminated with white light from a tungsten lamp. A lens was used to collimate the incident light from the inputs and focus the diffracted light from the grating. Based on the fiber pitch and spectral channel spacing, a linear dispersion of $\Delta x / \Delta\lambda = 250/35 = 7.143\,\mu\text{m}/\text{nm}$ was required in the focal plane of the lens. The linear dispersion of a lens and grating combination used in the Littrow configuration is given by: $\Delta x / \Delta\lambda = 2f\tan(\theta)/\lambda$ Where f is the focal length of the lens, and θ is the blaze angle of the grating. This equation is valid for wavelengths near the blaze wavelength. The diffraction grating used in this demonstration had a groove density of 400 lines/mm, blaze angle of 9.962 degrees (blaze wavelength = 845 nm for Littrow mounting), and was gold coated for high reflectivity. Based on the grating parameters, a lens with a focal length of 16mm was used to expand and focus the light to and from the fibers. By matching the linear dispersion of the lens and grating combination to the fiber pitch and spectral channel spacing, adjacent spectral channels from a single input are focused to adjacent output fibers. For example, input A, sends $\lambda = 830{,}865$, and 900 nm to outputs 1, 2, and 3 respectively. Furthermore, by spacing the input fibers with the same pitch as the outputs, adjacent inputs send adjacent spectral channels to the same output. Thus, output 3 receives $\lambda = 900{,}865$, and 830 nm from inputs A, B, and